PREFACE

This report presents the results of the 1999 General Aviation and Air Taxi Activity and Avionics Survey (GA Survey) and is prepared by the Statistics and Forecast Branch, Planning Analysis Division, Office of Aviation Policy and Plans (APO-1).

This survey provides information about the activity of the general aviation and air taxi aircraft fleet. It excludes information about commuter aircraft or airlines. The data and information obtained from the survey enable the Federal Aviation Administration to monitor the general aviation and air taxi fleet so that the FAA can, among other activities, anticipate and meet demand for National Airspace System (NAS) facilities and services, assess the impact of regulatory changes on the general aviation and air taxi fleet, and implement measures to ensure the safe operation of all aircraft in the airspace.

Each year the survey information is collected using a statistically designed sample survey. The sample is selected from all general aviation and air taxi aircraft registered with the FAA. The Appendix of this report provides a detailed description of the survey, its history, and the survey sample design.

To be more responsive to the needs of the general aviation community, a number of major changes have been incorporated into the survey over the years. Changes made since 1993 are detailed in the Appendix and in previous publications.

The GA Survey is currently under both agency and industry review and improvements are being implemented incrementally. The processing and review of the 1999 data resulted in several changes in editing and estimation methods. Summary level estimates for 1995, 1996, and 1997 have been revised to reflect these changes. Revisions of more detailed information for these years are not possible due to resource limitations. Data for years prior to 1995 have not been revised and may not be comparable to the latest available data.

The report is divided into seven chapters and an appendix as follows:

Chapter 1, **Historical General Aviation and Air Taxi Activity Measures, 1990-1999**, presents summary information from the 1990 through 1999 surveys. Statistics include general aviation and air taxi population sizes, the number of active aircraft, and total and average hours flown. Other historical measures include active aircraft by aircraft type and by primary use. In addition, Chapter I includes three tables which highlight the 1999 findings. These tables include active general aviation and air taxi aircraft by aircraft type and primary use, active general aviation and air taxi aircraft total hours by aircraft type and primary use, and active general aviation and air taxi aircraft and hours flown by FAA region and state of based aircraft.

Chapter II, Common General Aviation and Air Taxi Activity Measures, presents information on the general aviation and air taxi population size, the number of active aircraft, and total and average hours flown. Statistics on another measurement of activity - number of landings - are also given by total, local flight and cross-country flight.

Chapter III, **Primary and Actual Use**, lists number of active aircraft by primary use by type of aircraft and total hours flown by actual use by the general aviation and air taxi fleet.

Chapter IV, **Flying Conditions**, presents statistics on the conditions under which the general aviation and air taxi population flies. Detailed statistics on the number of hours flown under Visual Meteorological Conditions (VMC) and Instrument Meteorological Conditions (IMC) during the day and night are given.

Chapter V, **Fuel Consumption**, gives information on the average and total fuel consumption rates of the general aviation and air taxi fleet.

Chapter VI, **Airframe Hours**, provides data on the age of the general aviation and air taxi fleet -- average airframe hours per active aircraft.

Chapter VII, **Landing Gear Systems**, presents data on the number and annual hours flown by general aviation aircraft with a fixed or retractable landing gear system by aircraft type, and the number of general aviation aircraft with a fixed or retractable landing gear system by age of aircraft.

Appendix, **Methodology for the 1999 General Aviation and Air Taxi Activity Survey**, provides a detailed description of the survey, its history, the survey sample design, and a definition and explanation of "standard error," a statistical measure reported in each table.

Suggestions and comments about this report are welcome and will be given careful consideration in planning future editions. Please direct any comments to Mr. Arthur Salomon, Statistics and Forecast Branch (APO-110), phone number (202) 267-7924, FAX (202) 267-5370 or e-mail arthur.salomon@faa.gov.

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